

In the claims:

Please substitute the following full listing of claims for the claims as originally filed or most recently amended.

1. (Previously Presented) A field effect transistor formed at a surface of a layer of semiconductor material, said field effect transistor comprising  
a gate structure formed on said surface of said layer of semiconductor material, and  
a discontinuous film of material within said layer of semiconductor material and having a discontinuity formed in alignment with said gate structure.
2. (Previously Presented) A field effect transistor as recited in claim 1, wherein said discontinuity is self-aligned with said gate structure.
3. (Original) A field effect transistor as recited in claim 1, wherein said discontinuous film is a stressed film
4. (Original) A field effect transistor as recited in claim 3, wherein said stressed film comprises an insulator.
5. (Original) A field effect transistor as recited in claim 1, wherein said discontinuous film comprises an insulator.
6. (Original) A field effect transistor as recited in claim 1, wherein said discontinuous film has a stepped or staircase profile in cross-section.

7. (Original) A field effect transistor as recited in claim 3, wherein said stressed film has a stepped or staircase profile in cross-section.

8. (Original) A field effect transistor as recited in claim 7 wherein said stepped or staircase portion defines an effective channel depth.

9. (Original) A field effect transistor as recited in claim 1, wherein said discontinuous film is an insulator including a portion formed of oxidized SiGe, wherein said discontinuity defines a location of a conductor connected to a channel of said field effect transistor.

10. (Original) A field effect transistor as recited in claim 1, further including a void within said layer of semiconductor material.

11. (Previously Presented) An integrated circuit including a field effect transistor formed at a surface of a layer of semiconductor material, said field effect transistor comprising

a gate structure formed on said surface of said layer of semiconductor material, and

a discontinuous film of material within said layer of semiconductor material and having a discontinuity formed in alignment with said gate structure.

12. (Original) An integrated circuit as recited in claim 11, wherein said discontinuous film has a stepped or staircase profile in cross-section.

13. (Currently Amended) An integrated circuit as recited in claim ~~11~~ 12 wherein said stepped or staircase portion

defines an effective channel depth.

14. (Original) An integrated circuit as recited in claim 11, wherein said discontinuous film is an insulator including a portion formed of oxidized SiGe, wherein said discontinuity defines a location of a conductor connected to a channel of said field effect transistor.

15. (Original) An integrated circuit as recited in claim 11, further including a void within said layer of semiconductor material.

16. - 20 (Canceled)

21. (New) A field effect transistor formed at a surface of a layer of semiconductor material, said field effect transistor comprising

- a gate structure formed on said surface of said layer of semiconductor material, and

- a discontinuous film of material within said layer of semiconductor material at a predetermined distance from said surface of said layer of semiconductor material, said discontinuous film having a discontinuity which includes an edge which is located in a position defined by an edge said gate structure,

- said discontinuity defining a structure for performing at least one of:

- defining a depth of a conduction channel of said field effect transistor within said layer of semiconductor material to less than said predetermined distance from said surface of said semiconductor material; and

- applying stress to said conduction channel of said field effect transistor.

22. (New) A field effect transistor as recited in claim 21, wherein said discontinuity is self-aligned with said gate structure.

23. (New) A field effect transistor as recited in claim 21, wherein said discontinuous film is a stressed film

24. (New) A field effect transistor as recited in claim 23, wherein said stressed film comprises an insulator.

25. (New) A field effect transistor as recited in claim 21, wherein said discontinuous film comprises an insulator.